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SEQUENCE IN ECONOMICS COURSES AT THE UNIVERSITY OF CHICAGO

I

The teaching of Economics can show but small achievements in the development of sequential work, if sequence be understood to mean clear, orderly, coherent progression in arrangement of studies.

In our colleges¹ the practice is almost without variation. First comes an elementary course in "principles," commonly offered in the Sophomore year, and then, by a blunderbuss arrangement the shot is scattered all over the economic universe. Any "advanced" course may be taken in any order; the sequence of courses has but two steps, a first and a last. This situation is aggravated by the fact that the courses in economics do not serve as beginning, middle, or end of any sequence of work in the general field of social science. Usually the nearest approach to sequential arrangement is a half-hearted scheme of recommended prerequisites to economics courses, these recommended prerequisites being commonly courses in history or geography.² These courses, obviously good in themselves, are seldom taught with any particular reference to their being utilized in the work in economics.

The situation is shockingly little better in our universities.³ What has been said of the colleges can also be said of university undergraduate work. The organization of the graduate work is equally haphazard. The catalogues may announce certain courses as primarily for graduates; they may even announce that such courses will be given by men concerned solely with graduate instruction. Nevertheless, these "graduate" courses are seldom

¹ For purposes of brief discussion the term "colleges" is used in this paper to represent the institution with little or no graduate work. The term "university" will be understood to imply an institution offering a considerable amount of graduate work.

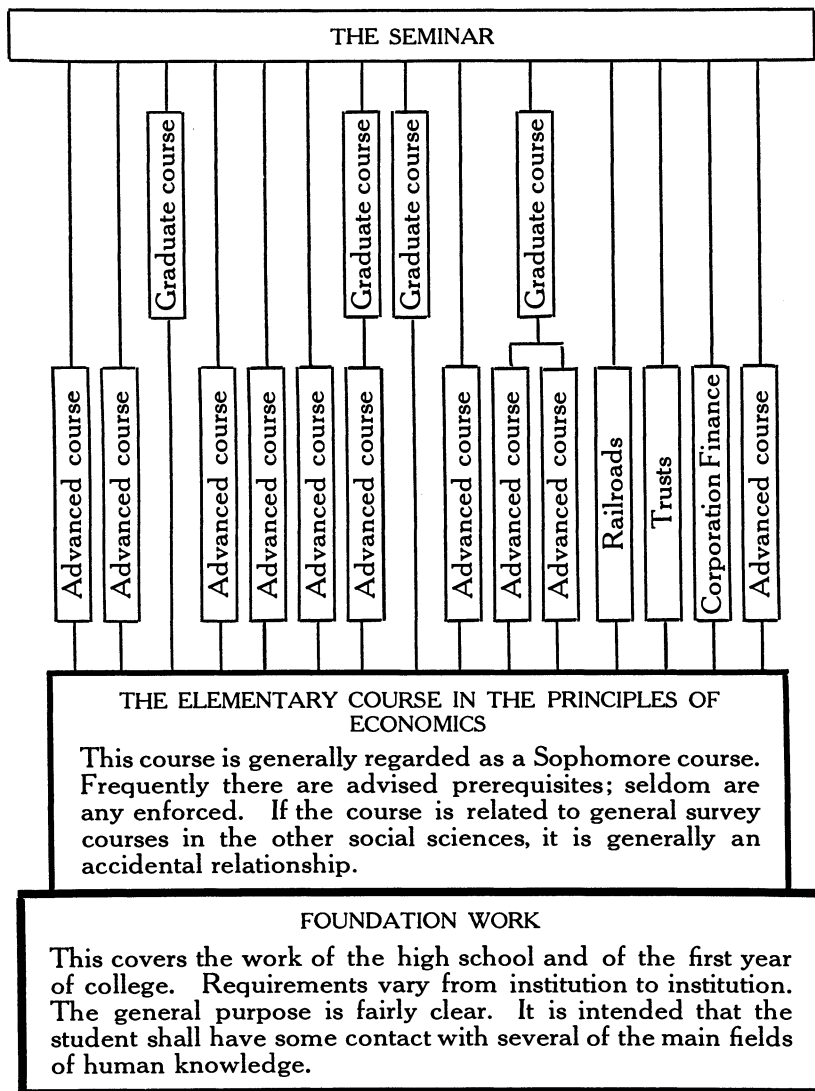
² See the "Report of the Committee on the Teaching of Economics," *Journal of Political Economy*, XIX, 760-89.

³ See note 1.

approached by the student through an orderly, progressive sequence of any considerable length. A few relatively short sequences in certain parts of the field of economics are found in practically all universities, but no institution has developed co-ordinated, inter-related sequences which cover the whole field of economics and make the natural and proper connections with the other social sciences. The presence of the "graduate instructor" does not solve the difficulties of such a situation. A "graduate instructor" may demand of his students far less real intellectual effort than may be necessary in many "undergraduate" courses. Even when he is of the right type, he is handicapped by the composition of his classes. He finds students who have had little or no training in economics sitting side by side with those who have done considerable work in the subject. He finds men who have had almost no preparation in the related sciences attempting to keep pace intellectually with those who have been well prepared. Unless the miracle of the baccalaureate degree works in our subject in a manner quite foreign to its manifestations in other fields of study, this is a gross error in management. The truth of the matter is that, in arrangement of work in economics, the blunderbuss has become the model for both college and university.

The causes of this blunderbuss arrangement are not far to seek. A generation ago relatively little had been done in economics, and this little, naturally enough, was mainly in the practical field. Individual courses, concerning themselves with individual problems, sprang up, became institutionalized, and were continued without question. They were continued in their old form even after related courses in related problems had been worked out—even after reorganization could have been made with little effort. This tendency continues to the present time. The borders of our field are ever shifting. Practical problems of endless variety press for solution. The specialist in the graduate institution marks out his own field and is little concerned in establishing lines of communication with other provinces. This geographical specialization he finds it possible to continue without feeling the pangs of hunger, because of manna from heaven in the form of ever-increasing numbers of students who, falling into his territory, make it possible

A DIAGRAM OF THE USUAL ARRANGEMENT OF COURSES IN ECONOMICS



The diagram shows the limited sequential arrangement. A course may be called a graduate course and yet have no other prerequisite than Economics I. Advanced courses may be primarily for graduates or primarily for undergraduates. In either case there will seldom be any prerequisite sequence. Three courses—Railroads, Trusts, and Corporation Finance—have been specifically named for purposes of illustration later in the paper.

for him both to impress university authorities with the importance of his subject and to gather material for his books by a surplus-value process not greatly different from that which Marx charged against the capitalist exploiters. We go to these masters for our training. We imbibe some learning and much contempt for pedagogy. We return to our college to teach and we there faithfully reproduce the water-tight compartments we saw in the university. Both college and university thus fall into the same arrangement of work.

Probably the classical attitude toward economic theory contributed unwittingly to the blunderbuss method. In the classical attitude there was not a little of the assumption that one could master certain general principles which could then be utilized in solving any and all practical problems. Such a position has its merits but it does not tend to develop sequential work, except possibly in the theoretical field. In mastering principles and then applying them there are but two steps, a first and a last. Accordingly it was more natural to provide for progression on the basis of the maturity of the student—more natural to draw a distinction between graduate work and undergraduate work—than to provide any systematic arrangement of courses according to subject-matter.

When once a given régime has become established, certain interests are likely to be concerned in maintaining the *status quo*. It has so proved in the case under discussion. Some persons have acquired intellectual vested rights in certain subjects and are opposed to any reorganization which might jeopardize their title. Others, bound by custom, indifference, and inertia, passively resist any change, whether for better or for worse. Still others constitute a group whose motive is commendable. They are, on principle, in favor of the present "elastic" arrangement as inherently better than any "fixed" sequential requirement. Sequence, they believe, will result in a rigid system and will be equivalent to putting economics in a straight-jacket.¹

¹ Such critics overlook two facts: (1) A present systematic arrangement may be made on a model sufficiently elastic to enable changes in the system as need arises. (2) The sequential arrangement has not even a hint of machine quality in the advanced work where, one would suppose, the main development in economic thought is to occur. In the graduate work the instructor is as unhampered as he could possibly

If the causes contributing to the origin and continuance of the present régime are patent, equally clear is the fact that a well-defined agitation for reform has set in. Reform is demanded in two respects. It is demanded (*a*) that some sort of progressive discipline comparable to that of mathematics be secured for students of economics, and (*b*) that better correlation be secured between the various departments of the social sciences. In stating the case these two demands become very much blended and in this blended form they are applied to all grades of instruction. With respect to universities, many persons are convinced that the graduate institution which establishes a "social science institute" in which the social science departments, acting in full consciousness of their interrelationships, really co-operate in investigation and in orderly progressive discipline of their students, will prosper both physically and intellectually as no university has yet prospered. With respect to colleges, some reformers are even contending that the colleges should break down, in at least the earlier stages of instruction in the social sciences, the present arbitrary departmental lines and should then develop progressive discipline. Some college instructors are actually engaged in working out "man-in-society" courses in the belief that a single course of such a character will furnish better training for both citizenship and advanced study than can be secured through any combination of the present courses: Government 1, Economics 1, Geography 1, Sociology 1, etc. In particular, "man-in-society" courses are being urged for the secondary schools where specialization is likely to present to immature minds social relationships in false perspective.

Whatever may occur in the secondary schools and colleges, there seems little likelihood that any very great revolution in method is impending in our universities. Reform and reorganization are close ahead, but the change is not likely to be of a violent character. The specialist will probably, and perhaps rightly, be under the blunderbuss method unless it be hampering him to give him homogeneous, well-prepared groups of students to work with. Even in the undergraduate work great latitude and discretionary power may be left to the instructor. The essence of sequence is not rigid supervision, any more than the essence of the blunderbuss method is academic freedom. Either arrangement of courses may be conducted on a basis of supervision or of *laissez faire*.

concerned only in a minor way with correlation, and the specialist will be largely consulted in framing university policies. It must be remembered, also, that the specialist is the man quite likely to have intellectual vested rights. Very few specialists will prove willing to surrender even small portions of their "fields" for the sake of hypothetical advantages accruing to future generations. Furthermore, our universities have already made considerable progress, and building on what we already have is far more feasible than an attempt to reconstruct from the ground up the work of the whole social science group, however fascinating such a task might prove to be. We must build on what we have. In such construction, moreover, we must care for very divergent classes of students. There is (a) the student who is primarily interested in some other subject, perhaps one of the physical sciences, and wishes merely to browse in economics; (b) the undergraduate who wishes to major in economics but does not contemplate graduate work; (c) the undergraduate who wishes to prepare for graduate work in economics at either the same or some other institution; (d) the graduate student who comes from some other institution (sometimes a good one, sometimes a poor one), and who may or may not have had considerable training in economics. In formulating some comprehensive plan for training these very different classes of students delicate adjustments are necessary. Vested rights must not be too ruthlessly sacrificed, for the development of the instructor must not be hampered; the graduate research interests must be safeguarded; the undergraduate interests must be met; amicable relations must be maintained with other departments and divisions of the institution; above all the plan must be flexible, for not only the scope of economics but also the methods of university administration are ever changing.

In view of these facts, which are far more complex in the university than they are in the college, and which vary from institution to institution, and in view of the further fact that plans must be modeled to suit financial resources, it is idle, and worse than idle, to expect that any comprehensive plan can be worked out and become applicable to all universities. The next step in our progress is pretty clearly the working-out of reforms with reference

to the local situations. Such an attempt has been made at the University of Chicago and the results appear in the following pages.

II

The arrangement of courses in economics which is now being worked out at the University of Chicago may be seen at a glance in the accompanying diagram,¹ which has, for purposes of the discussion, seven parts: (1) the foundation work in the various fields of human knowledge, (2) the social science survey, (3) the elementary course in economics, (4) the intermediate courses (together with corresponding courses from other social science departments), (5) the advanced courses (together with corresponding courses from other social science departments) in which there may be several steps in sequence, (6) the research courses in the various fields, and (7) the seminar. While there is occasional overlapping in the lower reaches of this sequential arrangement, it will, nevertheless, promote simplicity to take up each of these parts in turn.

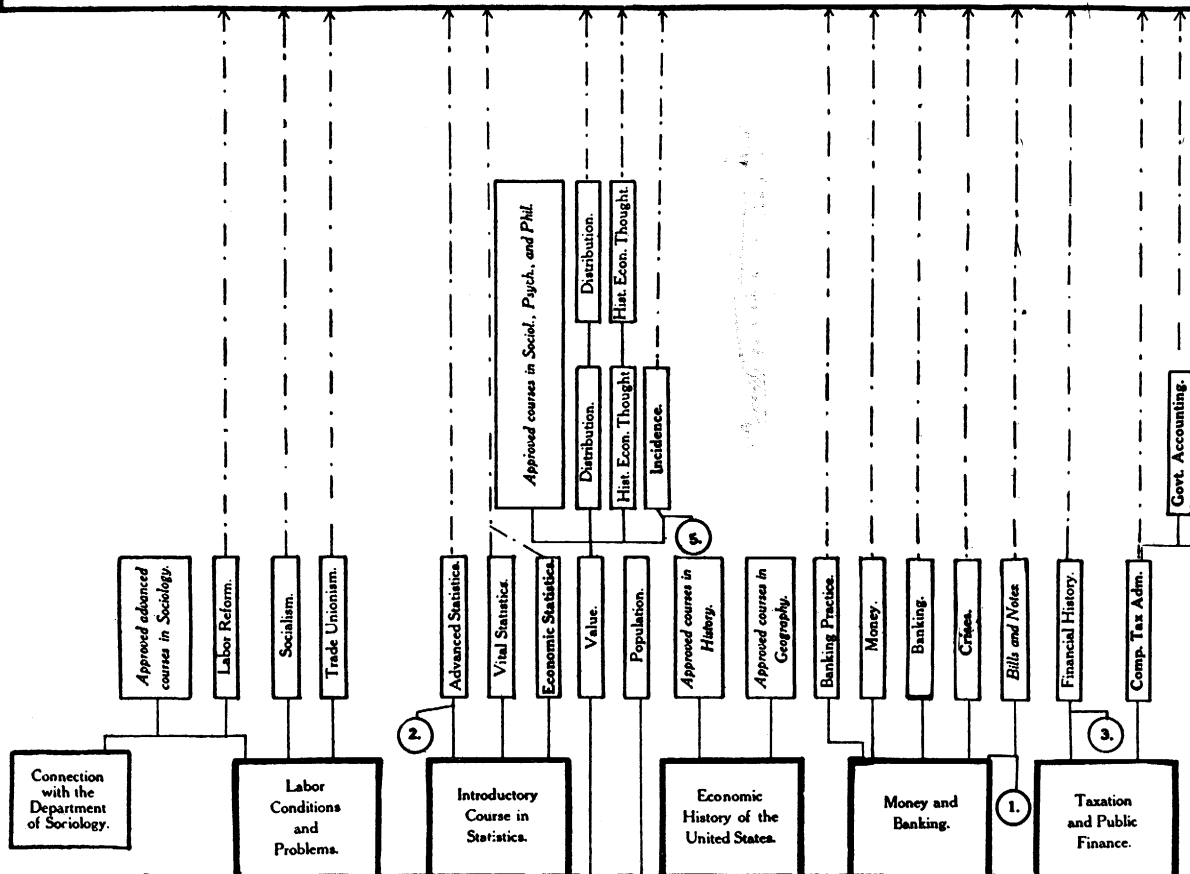
1. The foundation work in the various fields of human knowledge is a university, not a departmental, requirement. The undergraduate curriculum articulates the work of the high school and of the first two years of college, and, by certain specific requirements, provides for the laying of broad foundations. As the diagram shows, there are certain minimum requirements in English composition and literature, in mathematics, in the physical or biological sciences, in the social sciences, and in modern language. All this differs in no very fundamental way from the prevailing practice in American colleges and universities generally, and so may be dismissed without comment.

2. The social science survey is not so commonly found in other institutions; at least not as a consciously organized grouping of work. It represents one outcome of a great number of individual

¹ The diagram does not represent an ideal—merely a plan which seems to be workable at the present time. The courses printed in *italics* are given by other departments but may be counted as economics courses under certain conditions. The courses in black-face type are not at present given. They are inserted mainly to indicate the elasticity of the plan.

The Seminar.

Research courses in various fields.



The elementary course in the Principles of Economics. This is taken in the Sophomore year with some of the courses in the group below.

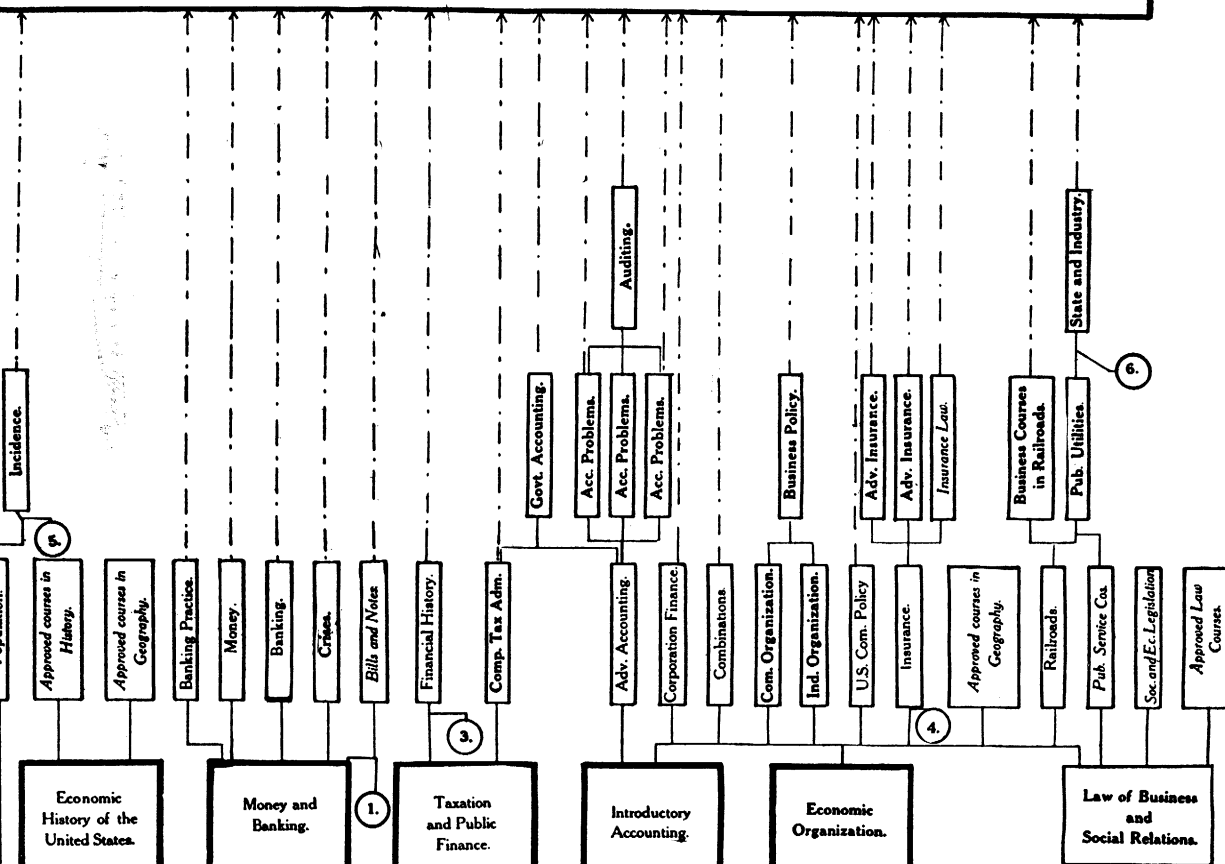
The Social Science Survey, covering part of the Freshman and Sophomore years. This work will include of college grade; (2) Political Science and Commercial Geography of college grade; (3) Psychology; (4) Philosophy; (5) Elementary Sociology or Social Origins. Part of this work may be

Foundation, covering the work of the high school, the Freshman year, and part of the Sophomore year. A certain minimum in: (1) English Composition and Literature; (2) Mathematics; (3) Science; (4) the Social Sciences (mainly History and Civics); (5) Modern Language (abstract).

1. Law of Business and Social Relations a prerequisite.
2. Appropriate courses in Mathematics a prerequisite.
3. Economic History of the United States a prerequisite.
4. Taxation and Public Finance a prerequisite.
5. Appropriate courses in Political Science a prerequisite.

The Seminar.

Research courses in various fields.



of Economics. This is taken in the Sophomore year. It may be taken contemporaneously with some of the courses in the group below.

Freshman and Sophomore years. This work will include: (1) Ancient, Mediaeval, and Modern History and Commercial Geography of college grade; (3) Psychology; (4) Ethics or Introduction to Sociology or Social Origins. Part of this work may be taken in the group below.

ool, the Freshman year, and part of the Sophomore year in college. This work includes Composition and Literature; (2) Mathematics; (3) the Physical or Biological Sciences; (4) History and Civics; (5) Modern Language (ability to use at least one as a tool).

in Mathematics a prerequisite. 3. Economic History of the United States a prerequisite. 4. Appropriate courses in Mathematics a prerequisite. 5. Public Finance a prerequisite. 6. Appropriate courses in Political Science a prerequisite.

and group conferences of the instructors of the social science department, in which the discussion centered about the problem of securing real co-operation among the departments concerned. In these conferences it became clear that a "man-in-society" course is possible neither now nor in the near future in the University of Chicago—certainly not as a course to *supplant* the elementary courses of the various departments concerned. While no such fusion course proved possible, the departments did agree to insist upon a social science survey¹ as a preparation for those students who expect to major in economics, sociology, or political science. This survey is taken mainly in the Sophomore year, although parts of it may come in the Freshman and Junior years. In conjunction with the above-mentioned "foundation work," it assures to students who contemplate majoring in economics a satisfactory background of work in the related sciences.² This represents a great improvement over the former situation at the University of Chicago.³ An adequate, well-rounded preparation was a matter of chance under the old régime. It now becomes a matter of certainty—with great resultant benefits for the later work.

3. The elementary course in the principles of economics corresponds to the course of practically the same title in other institutions except in so far as the methods followed⁴ at the University of Chicago may be divergent from those of other institutions. The diagram (facing p. 24) is faulty to the extent that it seems to imply

¹ This is known as the social science six-major sequence. The undergraduate curriculum provides that each student shall include in the 36 majors required for graduation one principal sequence of at least 9 coherent and progressive majors taken in one department or in a group of departments, and one secondary sequence of at least six majors selected from a different department or group of departments.

² The social science survey is useful not merely to those who expect to major in one of the social science departments. It is also available for the student who wishes to major in some less related field (for example, chemistry) and who wishes to secure a comprehensive view of organized society as his minor subject.

³ The University of Chicago was not alone in failing to assure an adequate preparation for work in Economics. The same situation obtained at practically all other institutions. See the "Report of the Committee on the Teaching of Economics" in *Journal of Political Economy*, XIX, 760-89.

⁴ These methods are described in detail in the *Journal of Political Economy*, XVII, 715-19, and need not be repeated here.

that this course will be taken subsequently in time to all the courses constituting the social science survey. In point of fact the course in principles nearly always will be taken subsequently to the work in history, commercial geography, and government. It may be either subsequent to or contemporaneous with the courses in psychology, ethics, introduction to philosophy, elementary sociology, or social origins.

4. The intermediate courses¹ reveal an abandonment of the old blunderbuss method. They represent an attempt (*a*) to place a fairly intensive survey of the field of economics within the compass of courses sufficiently few in number to make the program attainable by an undergraduate; (*b*) to eliminate unnecessary duplication of effort; (*c*) to provide either individually or in conjunction with one another an adequate basis for bona fide graduate work of really advanced type, and (*d*) to perform this last function in such a way as to make possible uniform treatment of graduate students whether they come from the undergraduate department of the University of Chicago or from any other institution.

An illustration taken from the corporation field will serve to show some advantages of the scheme of intermediate courses. Formerly, students who had completed the elementary course in economics could elect, in any order they chose, such courses as corporation finance, railroads, and trusts. The instructor would find in any one of these classes graduates and undergraduates; men who had had one or both of the other courses and men who had had neither; men with knowledge of accounting and men guiltless of such information; men who knew a considerable amount of law and men who scorned such erudition. Inevitably, there was a strong tendency for each course to sink to the level of its weaker members. Equally inevitably much common subject-matter was repeated in all these courses. As the work was

¹Four of these intermediate courses (the Introductory Course in Statistics, the Economic History of the U.S., Taxation and Public Finance, and Accounting) have been in existence, by title at least, for some time. Their function, however, is now changed, since they have become definitely classed as intermediate courses and, as will be seen later, the method used in conducting them has been considerably modified. The intermediate course on Labor Conditions and Problems was given last year for the first time and the courses on Money and Banking and on Economic Organization are to make their *début* as intermediate courses this present year.

arranged, however, a student would need to take all three of them if he wished to get a comprehensive view of economic organization. The diagram shows how all this has been changed. Proper correlation has been made with law and accounting. The common material has been removed from the courses in corporation finance, railroads, and trusts. These courses will hereafter be given as distinctly advanced work and they will be given to homogeneous, adequately prepared classes. The common material, accompanied by much new material, has been moulded into an intermediate course on economic organization, a general survey of which is now possible in one course instead of in three. In short, the new plan makes a better program for the undergraduate, eliminates unnecessary duplication, and makes possible a better grade of advanced work.

A statement concerning the intermediate courses would not be complete unless it conveyed some idea of the supervision which the department will exercise over these courses. They are obviously general survey courses of undergraduate grade—courses serving as preparation for advanced work—and accordingly the entire department will co-operate with the individual instructor in charge of any intermediate course. Such an instructor will present to the department for criticism, suggestion, and approval a detailed syllabus of his course—a syllabus¹ constructed as far as possible on the problem method. The instructor will also present for criticism and approval the questions for the final examination. Finally, the quality of the instruction in these intermediate courses will be under constant scrutiny. Criticisms and suggestions will be sought from all available sources.

The aim of all this is obvious. In part it is a desire to avoid unnecessary duplication of material. A comparison of the syllabi will serve to check this waste. In part it is an arrangement designed to enable every instructor in an *advanced* course to know precisely what he may assume his students to have covered by way of preparation in these intermediate courses. In part it sets up definite machinery by which all advanced classes are made homo-

¹ It is expected that these syllabi will eventually be printed, or at least mimeographed, and placed in the hands of the students.

geneous, no matter from what institutions the students may have come; *for the student from another institution will not be admitted to advanced courses for which he is unprepared.* In part it is a plan to promote efficient undergraduate teaching and to provide the team-work so essential in laying adequate foundations for really progressive work. The plan does not, however, hamper individual enterprise and initiative. Even in these intermediate courses, the *method* of conducting the class is left to the instructor, so long as he gets results.

5. The case of the advanced courses has, by implication at least, been treated to a considerable extent in the foregoing discussion of intermediate courses. However, lest the old titles used in the diagram lead to the inference that no vital change has occurred, it is worth while even to repeat. These advanced courses are not of the old type even if old names have been used. They are built on a definitely known foundation and they now represent work of an advanced grade of severity and discipline. Furthermore, they are connected in an orderly scheme with the work of other departments. That connection was formerly left to chance. Best of all, the students in them will be a homogeneous group who definitely understand this to be advanced work in which the originality and scholarly power of the instructor are to have full sway. In these courses, departmental control is at a minimum.

6. The discipline in the various fields culminates in the research courses offered by the various instructors. These courses might quite as well have been called "individual seminars." When a student starts his research work he will work under the personal direction of the instructor in whose field the thesis lies. Instructor and student hold weekly conferences, to which other members of the instructing staff of the department of economics or of allied departments are invited when questions come up which impinge on other fields. In other words, the guidance of research work is personal in character, and here also great care is taken to make proper correlation with allied fields.

7. The general seminar serves as a common meeting-point rather than as a place of class discipline. Here the instructors present their own investigations; heads of allied departments

discuss the relation of their subjects to the field of economics; mature research students, whose work has already been tested in the individual seminar, report such parts of their results as are of general interest; the general bibliography of economics, as opposed to the bibliography of particular fields, is presented; and the students are here enabled to come into touch with scholars from other institutions and with men from non-academic circles. In these various ways the general seminar serves to draw together the students who have reached that grade of maturity which enables them to be working as specialists. Even these students are never allowed to forget the close relations of the various fields of economics the ties of economics to the other social sciences, and of all these to life.

III

The plan, in its broad outlines, has been presented. Can it actually be realized? Is it more than a mere paper scheme? Is it administratively possible? One answer is that thus far in its administration no serious difficulties have developed, although it must be admitted that it is not yet fully in operation and that experience with the parts now in operation has not been lengthy. Another answer is that it is perfectly possible to look ahead and judge the plan by the way it would apply to the various classes of persons who may come under its influence.

Take first the undergraduate who wishes merely to browse in economics. Obviously the plan should not be either accepted or condemned because of its relation to the browser, who may or may not be also a drowser. As a matter of fact, however, it should be noted that, while the browser will be handicapped if he has not had the social science survey, the difficulty should not prove insuperable. In the actual practice of administration, some of this survey would in any case be taken simultaneously with, and not prior to, the course in principles. The browser may accordingly take the elementary course and such intermediate courses as his vagrant fancy may elect. The new régime will not seriously handicap the browser.

For the undergraduate who wishes to major in economics the case is perfectly clear. He will take the social science survey as

his six-major sequence. His nine-major sequence¹ will include not fewer than four intermediate courses and not fewer than four advanced courses. His training will thus have both breadth and depth. Such a student will be taken through the territory of the related departments up to the mountain top of the course in principles from which he gets his general survey of the promised land. At the moment he sees only the main features of this promised land, and many of these he sees in distorted perspective. He is then turned over to three or four guides who personally conduct him through a corresponding number of economic provinces (the intermediate courses). Having had a fair survey of these several provinces, he is asked to take up his residence in one of them and do a little intensive cultivation of the soil. This all seems a clear advance over our former method. By the new method economics is taught in its relation to the rest of life. The discipline is progressive both in content and severity. Useless repetition is avoided, and the pedagogically justifiable repetition necessary for association and correlation is retained.

The system is readily adaptable to the undergraduate who wishes to do graduate work in the department. Such a student would be advised (a) to take his six-major sequence in the "social science survey," (b) to take his nine-major sequence in some related social science department, such as political science, sociology, psychology, philosophy, or history, (c) to take some of his electives in working through the entire range of the intermediate courses in economics. In other words, since his graduate work is to be in economics he would be expected to spend his undergraduate work in laying broad foundations both in economics and in related subjects.

The position of the graduate of another institution who comes to the University of Chicago for graduate work is also reasonably clearly defined. The advanced courses will actually be "advanced." They will not be adapted equally to students of little and of much training. If a student's past training justifies his doing advanced work in a certain line, he will be admitted to the advanced courses in that line. If it does not, he will be expected to "establish equivalence" by taking the appropriate interme-

¹ See footnote on p. 26.

ciate¹ courses. Take another instance. Let a student come from another undergraduate institution with fair training, but with training which does not correspond in all particulars to the training suggested by the *names* of the intermediate courses as given at the University of Chicago. That will constitute a case for individual inquiry and adjustment. Perhaps this student can meet the necessities of his situation by independent study of the syllabi of certain intermediate courses; perhaps he should visit certain intermediate courses; perhaps he should actually take certain courses and yet not receive formal graduate credit for the same. Beyond question the case will take time and trouble to adjust. Equally beyond question it would be difficult to adjust such a case so unfortunately as it was formerly adjusted by the blunderbuss method.

The case of greatest apparent hardship is that of a good man from a good institution who has had little work in social science and none in economics. He must "establish equivalence." If he is a first-class man of mature age it may suffice for him to visit some of the intermediate courses and take the others with half-credit or no credit at all. Unless he has unusual diligence and capacity, he will need to take more than the average time to secure his doctorate. The final outcome will be that this man will have been well trained on the basis of a broad outlook on human knowledge. His case is really one for rejoicing rather than lamentation.

By way of summary of the situation as it affects the graduate student it is to be said that he reaps advantage at every point. His requirements are susceptible of clear statement and he has the assurance that his discipline will be progressive and directed in a rational way toward a definite goal.² His classmates will be his

¹ After next year these intermediate courses will count for half-credit for graduate work. The goal is ultimately to allow no graduate credit for any of this entire group of courses.

² At the opening of the academic year every graduate student files with the department a complete statement of his past training. Each case is taken up at departmental meeting and the student is informed (a) what work he needs in *preparation* for his graduate work, whether such preparatory courses fall in economics or in related fields; (b) what courses in economics he needs in order to secure a well-rounded view of the field; (c) what methods he should pursue in order to prepare him for his specialized work.

peers. His instructors will be unhampered by poorly prepared students. His course will be such as to enable him to go out with some real perspective in the social science domain.

But how will this plan affect the instructing staff of the department? As the department is constituted, it will be excellent for those who can live through it. The staff is made up mainly of relatively young or middle-aged men who are just in the process of development. Every one of these developing men has, or can have, a section of the elementary course and the intermediate course¹ leading to his own subject. In these he keeps his connection with the broader aspects of his work, and keeps this connection under conditions necessitating team-play. Then he has his advanced courses in which he cuts out his own field in pretty much his own way. He has also his problem or research courses for the most advanced men, who, be it kept in mind, have come up through broad training and are alert for the implications of the work. Working in such courses and with such material will be at least a moderate safeguard against stagnation. Beyond question five years of hard work are ahead of the department in getting the machine into smooth operation. With proper secretarial aid and competent research assistance, however, the project is perfectly feasible and emphatically of great value to those who carry it out. Their losses through surrender of a part of a "field"—a surrender made necessary by the rearrangement of the courses—will be more than offset by the obvious gains of the new method.

Finally, it is to be noticed that the plan is flexible. If it should later be deemed wise to instal research or graduate professors, there should be no difficulty. If any block of the work becomes too great for one instructor, there will be little difficulty in making adjustments. There will always be work for willing hands in the elementary and intermediate courses. If new courses or even new fields are to be opened up it should not be difficult to find their proper niches. Indeed, the plan has been specifically drawn to make possible proper connection with the developing field of training for business, charitable and philanthropic service, and public

¹ It will be remembered that the quarter system in use at the University of Chicago gives an instructor six courses per year.

service. Even the loss of a member of the instructing staff, when once the system is in operation and the syllabi for the intermediate courses are available, will disrupt departmental arrangements less seriously than formerly. Obviously, no system can ever be devoid of minor difficulties. Equally obviously this new plan has no more of administrative difficulty of any sort than had the old. Its intellectual and administrative gains are many. "The blunderbuss" says an old writer, "is an acceptable weapon if the shooting need be neither clean nor deep." Perhaps so, but the day of the blunderbuss is past.

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